

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the present application:

1. (Currently Amended) An electromechanical filter comprising:
a first member that physically changing changes as a result of input of a signal; and
a second member, ~~arranged~~ spaced by a predetermined ~~interval~~ distance from the first member, ~~detecting that detects~~ physical change of the first member when a signal of a predetermined frequency is input to the first member[.];
wherein one of the first member and the second member is a wall-shaped member covering the other one of the first member and the second member.

2. (Currently Amended) The electromechanical filter according to claim 1, wherein:
the first member has a symmetrical structure with respect to a center axis of the first member, and oscillates as a result of input of a signal; and
the second member detects oscillation of the first member when a signal of [[a]] the predetermined frequency is ~~inputted~~ input to the first member.

3. (Canceled)

4. (Currently Amended) The electromechanical filter according to claim 1, further comprising:

an input side electrode connected to the first member ~~causing~~ and configured to cause the first member to be excited by ~~inputting input of~~ a signal to the first member; and

an output side electrode connected to the second member~~[[,]]~~ and outputting a signal of the same frequency as the signal ~~inputted input~~ to the first member when the second member detects oscillation of the first member.

5. (Currently Amended) The electromechanical filter according to claim 1, further ~~equipped with~~ comprising an input side electrode ~~arranged~~ spaced by a predetermined interval distance from the first member~~[[,]]~~ and causing the first member to be excited as a result of input of a signal,

wherein the second member ~~[[is]]~~ comprises an output side electrode ~~outputting that~~ outputs a signal of the same frequency as the signal ~~inputted input~~ to the first member when the second member detects oscillation of the first member.

6. (Currently Amended) The electromechanical filter according to claim 1, wherein the second member is ~~[[a]]~~ the wall-shaped member covering the first member, and the electromechanical filter further comprises:

an input side electrode connected to the second member, causing excitation of the first member as a result of input of a signal to the second member;

an electrode, connected to the first member, ~~applying~~ and configured to apply a voltage to the first member, and

an output side electrode connected to the second member, outputting a signal of the same frequency as the signal ~~inputted~~ input to the first member, when ~~while~~ the second member detects oscillation of the first member.

7. (Currently Amended) The electromechanical filter according to claim 1, wherein at least the first member of the first ~~member~~ and second ~~member~~ members is composed of a substance formed through self-assembly containing carbon nanotube, carbon nanohorn, or fullerenes, and the predetermined ~~interval~~ distance is a microscopic gap formed by self-assembly by at least the first member.

8. (Currently Amended) The electromechanical filter according to claim 1, wherein at least the first member of the first ~~member~~ and the second ~~member~~ members is composed through growth using catalyst material and is connected to an electrode section composed of electrode material containing the catalyst material.

9. (Original) The electromechanical filter according to claim 1, wherein the first member and second member are constituted by a complex composition including substances ion-doped into a carbon nanotube and substances containing other atoms and molecules.

10. (Original) The electromechanical filter according to claim 1, wherein the first member and the second member are formed artificially using fine-processing technology.

11. (Currently Amended) An electromechanical filter comprising:

a first member that physically changes as a result of input of a signal; and
a second member, spaced by a predetermined distance from the first member, that detects
physical change of the first member when a signal of a predetermined frequency is input to the
first member.

~~The electromechanical filter according to claim 1,~~ wherein the physical change of the first member comprises oscillation, and detection of oscillation of the first member is ~~carried out~~ performed by detecting tunnel current flowing between the first member and ~~the an~~ an electrode using a probe connected to the electrode outputting the signal ~~inputted~~ input to the first member.

12. (Currently Amended) The electromechanical filter according to claim 1, ~~wherein with~~ physical change of the first member ~~comprising~~ comprises oscillation, ~~and the electrochemical filter~~ further comprising an adjustment section causing the predetermined interval distance between the first member and the second member to change, and causing a resonance frequency of the first member to change.

13. (Original) An electrical circuit including a filter bank employing the electromechanical filter according to claim 1.

14. (Currently Amended) Electrical equipment ~~having~~ including the electrical circuit according to claim 13.

15. (New) The electromechanical filter according to claim 11, wherein:

the first member has a symmetrical structure with respect to a center axis of the first member, and oscillates as a result of input of a signal; and

the second member detects oscillation of the first member when the signal of a predetermined frequency is input to the first member.

16. (New) The electromechanical filter according to claim 11, further comprising:

an input side electrode connected to the first member and configured to cause the first member to be excited by input of a signal to the first member; and

an output side electrode connected to the second member and outputting a signal of the same frequency as the signal input to the first member when the second member detects oscillation of the first member.

17. (New) The electromechanical filter according to claim 11, further comprising an input side electrode spaced by a predetermined distance from the first member and causing the first member to be excited as a result of input of a signal,

wherein the second member comprises an output side electrode that outputs a signal of the same frequency as the signal input to the first member when the second member detects oscillation of the first member.

18. (New) The electromechanical filter according to claim 11, wherein the second member is a wall-shaped member covering the first member, and the electromechanical filter further comprises:

an input side electrode connected to the second member, causing excitation of the first member as a result of input of a signal to the second member;

an electrode, connected to the first member and configured to apply a voltage to the first member, and

an output side electrode connected to the second member, outputting a signal of the same frequency as the signal input to the first member, when the second member detects oscillation of the first member.

19. (New) The electromechanical filter according to claim 11, wherein at least the first member of the first and second members is composed of a substance formed through self-assembly containing carbon nanotube, carbon nanohorn, or fullerenes, and the predetermined distance is a microscopic gap formed by self-assembly by at least the first member.

20. (New) The electromechanical filter according to claim 11, wherein at least the first member of the first and second members is composed through growth using catalyst material and is connected to an electrode section composed of electrode material containing the catalyst material.

21. (New) The electromechanical filter according to claim 11, wherein the first member and second members are constituted by a complex composition including substances ion-doped into a carbon nanotube and substances containing other atoms and molecules.

22. (New) The electromechanical filter according to claim 11, wherein the first member and the second member are formed artificially using fine-processing technology.